

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020996**Date Inspected:** 25-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Qiu Wen, An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 14W:

Repair welding of weld joint no: SEG3020BB-064 [Bottom Plate (BP) 3090A to Vertical Shear Plate SA3450A, Complete Joint Penetration (CJP) weld in between panel point (PP) 125~126]. The welder is identified as 067942 and was observed welding in the 2G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). AB/F QA was identified as Mr. Liu Tao. The welding variables recorded by this QA appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair-1. Repair welding was done as per Critical Welding Repair (CWR) Report: B-CWR 2793 Rev-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020BB-114 (Anchor Plate (AP) 3032A to Vertical Shear Plate SA3448A, CJP weld at PP126). The welder is identified as 066695 and was observed welding in the 3G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to

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comply with WPS: B-T-2233-ESAB.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020BE-003 (Anchor Plate (AP) 3032A to Brace Plate X5056A, Fillet weld at PP126). The welder is identified as 045175 and was observed welding in the 2F position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2132-ESAB.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020BC-003 (Anchor Plate (AP) 3032A to Brace Plate X5056F, Fillet weld at PP126). The welder is identified as 045175 and was observed welding in the 2F position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2132-ESAB.

Repair welding of weld joint no: SEG3020X-013 [Bottom Plate (BP) 3091A to Longitudinal Diaphragm (LD) 3049B, Complete Joint Penetration (CJP) weld in between panel point (PP) 126~126.5]. The welder is identified as 047864 and was observed welding in the 2G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC CWI was identified as Mr. An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair-1. Repair welding was done as per Critical Welding Repair (CWR) Report: B-CWR 2662 Rev-3.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020R-020 (Floor Beam Diaphragm X4859G to Floor Beam (FB) 3321A, CJP weld at Panel Point PP126). The welder is identified as 066239 and was observed welding in the 2G position. ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-T-2232-ESAB.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020L-175 (Floor Beam (FB) 3325A to stiffener X4886B, Fillet weld at Panel Point PP127). The welder is identified as 201215 and was observed welding in the 2F position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2132-ESAB.

Repair welding of weld joint no: SEG3020D-052 [Bottom Plate (BP) 3091A to Floor Beam (FB) 3343A, Complete Joint Penetration (CJP) weld at panel point (PP) 128.3]. The welder is identified as 045246 and was observed welding in the 2G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by this QA appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair-1. Repair welding was done as per Critical Welding Repair (CWR) Report: B-CWR 2734 Rev-2. Attached photograph provide additional details.

Repair welding of weld joint no: SEG3020E-056 [Bottom Plate (BP) 3093A to Floor Beam (FB) 3343A, Complete Joint Penetration (CJP) weld at panel point (PP) 128.3]. The welder is identified as 066398 and was observed welding in the 2G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by this QA appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair-1. Repair welding was done as per Critical Welding Repair (CWR) Report: B-CWR 2734 Rev-2.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract

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documents.



### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Gaikwad,Umesh
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Quality Assurance Inspector
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<b>Reviewed By:</b>	Peterson,Art
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QA Reviewer
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